

REMARKS

Applicants first wish to thank the Examiner for the courteous interview conducted with Applicants' representative, Ms. Leber, on July 30, 2003. During the interview, Ms. Leber showed the Examiner a sample of a fabric embodying the features of Applicants' claim 1. This sample was left with the Examiner. Ms. Leber discussed the prior art with the Examiner, and suggested possible claim amendments. In particular, Ms. Leber explained the significant structural differences between Applicants' fabric and the double-knit fabrics described in the Hunneke et al. reference – differences that will be discussed below in Applicants' remarks.

Claims 1-12 and 14 are pending in this application. Claims 1, 4, 11 and 12 are amended herein. Claims 2, 3 and 5-10 remain unchanged. Claim 13 has been cancelled, without prejudice. Claim 14 has been added.

Applicant's invention features a composite textile fabric having an integrated body formed of an inner fabric layer made of a yarn comprising a plurality of synthetic yarn fibers which have been rendered hydrophilic and an outer fabric layer comprising a material selected from the group consisting of a moisture absorbent material, a plurality of synthetic yarn fibers and a combination thereof.

In one aspect, featured in amended claim 1, the inner fabric layer defines a surface configured to be worn facing a wearer's skin. The outer fabric layer is immediately adjacent the inner fabric layer, and is configured to define an outer surface of a garment. These layers are formed concurrently by knitting a plaited construction, to create the integrated body for movement of moisture between the fabric layers.

The surface of the inner fabric layer includes a plurality of continuous, open channels extending lengthwise over a major portion of the composite textile fabric. The channels advantageously facilitate maintaining a cushion of air along the wearer's skin for added warmth during static physical conditions and enhanced airflow during physical activity, creating a heat dissipating or cooling effect. The channels further provide avenues for evaporation of moisture from the wearer's skin, to minimize wearer discomfort in early dynamic states, until equilibrium is reached, and also maintain moisture absorbent fibers away from the skin to significantly

reduce the after chill effect the commonly occurs in 100% hydrophilic constructions when going from a highly active state (dynamic) to a state of rest (static). (See, e.g., page 3, lines 3-4; page 4, lines 19-22; and page 5, lines 8-16.)

In another aspect, featured in new claim 14, the first inner fabric layer and second outer fabric layer are formed concurrently by knitting a plaited construction, as discussed above, and an inner surface of the composite textile fabric includes a surface texture defined by the channels and a plurality of raised fiber pillars extending between the channels.

Claims 1-11 and 13 are rejected as being obvious and therefore unpatentable over Rock et al. U.S. 5,547,733 in view of Hunneke et al. U.S. 5,636,533. We respectfully traverse

As acknowledged by the Examiner (5/7/03 office action, page 4), Rock does not teach or suggest a fabric including a plurality of channels.

The Examiner cites Hunneke to supply a teaching of channels, stating that

Hunneke teaches inner and outer knitted layers which are joined by interlock stitches to form a composite fabric...The inner thermal layer has alternating air pockets and ribs, equated to Applicant's 'plurality of channels,' arranged in staggered rows.

While Applicants do not disagree with the Examiner's characterization of the Hunneke fabric as including alternating air pockets and ribs, these air pockets and ribs are not properly equated with Applicants' channels.

As discussed at the interview, Hunneke's fabric is a double-knit fabric, i.e., a fabric having two distinct layers 12 and 14, which are connected in discrete areas by interlock stitches 24. Air pockets 28 (Fig. 3) are formed between the two layers where the fabric layers are not connected. While these air pockets are not numbered in Fig. 2 of Hunneke, their positioning between the layers can be seen best in this figure. As shown in Fig. 3 and described at col. 3, lines 1-13, the air pockets 26 alternate with "checks" 18, i.e., regions where the two layers are stitched together, to form a checkerboard pattern.

In contrast, as illustrated by the fabric swatch presented to the Examiner at the interview, in preferred implementations Applicants' fabric includes a plurality of continuous, open channels that extend lengthwise over a major portion of the composite textile fabric. As illustrated by the

fabric swatch, it is also preferred that the inner surface of the fabric (the surface configured to be worn facing the skin of a wearer) include a surface texture defined by the channels and a plurality of raised fiber pillars extending between the channels.

Even if Hunneke's air pockets could be fairly construed as "channels," which Applicants do not concede, the air pockets are not continuous or open, and do not extend lengthwise over a major portion of the composite textile fabric, as recited in amended claim 1. Nor does the inner surface of Hunneke's fabric include a surface texture defined by a plurality of channels and a plurality of raised fiber pillars extending between the channels, as recited in new claim 14.

Claim 12 is rejected as being obvious and therefore unpatentable over Rock et al. '733 in view of Hunneke et al. '533, and further in view of Conway U.S. 5,906,876. We respectfully traverse.

Conway '876 is directed to a purpose entirely different from that of Rock and Hunneke, i.e., to absorb bodily fluids (urine or menstrual fluid). In Conway, bodily fluids pass through an inner hydrophobic layer against the skin, for transport through a middle, hydrophilic layer into a highly absorbent outer layer, away from the skin, for storage. In contrast, Rock et al. '733 and Hunneke et al. '533 are directed toward providing insulation or cooling of the skin, depending on the activity, with an inner, hydrophilic layer for transport of perspiration away from the skin to an outer layer from which the perspiration is allowed to evaporate. As a result, there is no teaching or suggestion for combining the references in the manner proposed by the examiner.

Furthermore, even if the references can be properly combined, which Applicants do not concede, Conway '876 fails to provide teaching or suggestion of the features of Applicants' invention of claim 1 (from which claim 12 depends) found lacking in Rock et al. '733 in view of Hunneke et al. '533.

None of the cited references, whether taken alone or in any proper combination, teaches or suggests what Applicants have discovered, i.e., a fabric having a surface, configured to be worn adjacent the skin of a wearer, formed of a hydrophilic material and including a plurality of channels that advantageously facilitate maintaining a cushion of air along the wearer's skin for added warmth during static physical conditions and enhanced airflow during physical activity.

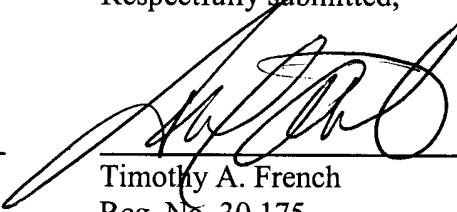
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In view of the above, Applicants respectfully request that all of the rejections under 35 U.S.C. 103(a) be withdrawn.

Enclosed is a \$110.00 check for the Petition for Extension of Time fee. Please apply any other charges or credits to deposit account 06-1050, referencing attorney-docket no. 10638-047001.

Respectfully submitted,



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